

Interior—Geological Survey, Reston, Va.—1984—G84433
Prepared on behalf of the Planetary Geology Program,
Planetary Division, Office of Space Science, National Aero-
nautics and Space Administration under contract W-13709

NOTES ON BASE
This sheet is one in a series of maps that cover the surfaces of the Galilean satel-
lites of Jupiter at a nominal scale of 1:5,000,000 (Batson and others, 1980).
The source for the series was Voyager 1 and 2 images. Essential features of the
mapping are noted below.

CARTOGRAPHIC CONTROL
Mercator, Lambert conformal conic, and polar stereographic projections used for
the maps of Ganymede are based on a sphere with a radius of 2631 km. The
projections have common scales of 1:4,780,000 at lat 21.3° and 1:4,769,000
at lat 165.2°. Longitudes increase to the west in accordance with astronomical
convention. Planimetric control was derived by photogrammetric triangulation
using Voyager 1 and 2 pictures (Davies and Katayama, 1981). The meridians
are numbered so that the reference crater, Anat, is centered on lat 2.8° S, long
128°.

MAPPING TECHNIQUE
A series of mosaics of Voyager 1 and 2 pictures was assembled at 1:5,000,000
using projections described above. Sizes, shapes, and positions of features were
taken from the base mosaic using portrayal and interpretation techniques de-
scribed by Inge (1972) and Inge and Bridges (1976). Surface relief is shown as
if illuminated from the west. Albedo markings are shown as they appear on the
Voyager pictures. Extreme variations in picture resolution precluded consistent
interpretation and portrayal of the pictures used for map compilation. Further
limitations were imposed by dark albedo markings, which tend to obscure dis-
tinctive surface details.

The colors chosen for this map are intended to provide optimum discrimination
of detail and do not represent the color of Ganymede.

Image analysis and airbrush representation were made by Jay L. Inge.

NOMENCLATURE

Names on this sheet are approved by the International Astronomical Union (IAU),
1980 except for the provisional names listed below.

Provisional names: Arbelia Sulcus, Kittu, and Misharu.

Jg 5M 0/324 AN: Abbreviation for Jupiter, Ganymede (satellite); 1:5,000,000
series; center of sheet, lat 0°, long 324°; shaded relief with
albedo markings (A), nomenclature (N).

Jg-10: Abbreviation for Jupiter, Ganymede; sheet 10.

REFERENCES

Batson, R. M., Bridges, P. M., Inge, J. L., Isbell, Christopher, Masursky, Harold,
Strobel, M. E., and Tynes, R. L., 1980, Mapping the Galilean satellites of
Jupiter with Voyager data: Photogrammetric Engineering and Remote Sensing,
v. 46, no. 10, p. 1303-1312.

Davies, M. E., and Katayama, F. Y., 1981, Coordinates of features on the Galilean
satellites: Journal of Geophysical Research, v. 86, no. A10, p. 8635-8657.

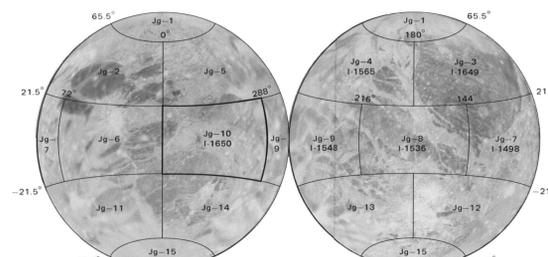
Inge, J. L., 1972, Principles of lunar illustration: Aeronautical Chart and In-
formation Center Reference Publication R5-72-1, 60 p.

Inge, J. L., and Bridges, P. M., 1976, Applied photointerpretation for airbrush
cartography: Photogrammetric Engineering and Remote Sensing, v. 42, no. 6,
p. 749-760.

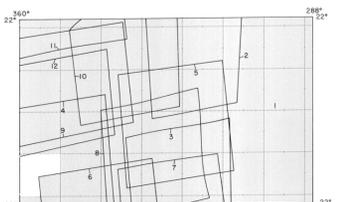
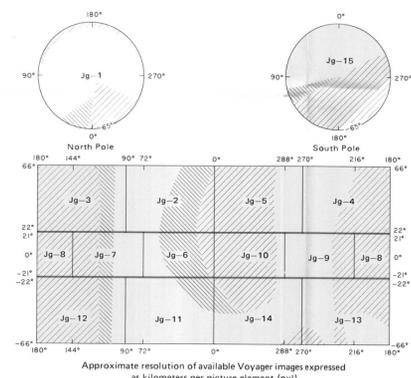
International Astronomical Union, 1980, Working Group for Planetary System
Nomenclature, in 17th General Assembly, Montreal, 1979, Proceedings: Inter-
national Astronomical Union Transactions, v. 17B, p. 297-304.

VOYAGER 1

Index No.	Picture No.	Primary Source	Supplemental Source
1	0786J1+002	0738J1+000	0889J1+000
2	0815J1+000	0750J1+000	0872J1+000
3	0825J1+000	0775J1+000	0875J1+000
4	0923J1+000	0770J1+000	0878J1+000
5	0925J1+000	0781J1+000	0885J1+000
6	0930J1+000	0780J1+000	0885J1+000
7	0941J1+000	0808J1+000	0881J1+000
8	0940J1+000	0811J1+000	0881J1+000
9	0951J1+000	0817J1+000	0927J1+000
10	0951J1+000	0827J1+000	0827J1+000
11	0965J1+000	0829J1+000	0956J1+000
12	1003J1+000	0881J1+000	1002J1+000
		0882J1+000	1005J1+000



QUADRANGLE LOCATION
Number preceded by 1 refers to published topographic map



The rendition of features on this map was controlled by
reference to the primary source pictures outlined above.
Supplemental source images used during the compilation
are listed separately. Copies of various enhancements of
these pictures are available from National Space Science
Data Center, Code 601, Goddard Space Flight Center,
Greenbelt, MD 20771.

NOTE TO USERS
Users noting errors or omissions are urged to indicate them
on the map and to forward it to U.S. Geological Survey,
Building 4, Room 454, 2255 North Gemini Drive, Flagstaff,
Arizona 86001. A replacement copy will be returned.

SHADED RELIEF AND SURFACE MARKINGS OF THE MISHARU QUADRANGLE OF GANYMEDE

Jg-10
Jg 5M 0/324 AN
1984

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